IN THE SPECIFICATION:

On page 1, prior to line 6, please insert the following headings and paragraph:

--Cross Reference to Related Applications

This application is for entry into the U.S. national phase under §371 for International Application No. PCT/EP02/00047 having an international filing date of January 04, 2002, and from which priority is claimed under all applicable sections of Title 35 of the United States Code including, but not limited to, Sections 120, 363 and 365(c).

Technical Field--

On page 1, prior to line 13, please insert the following heading:

--Background of the Invention--

On page 2, prior to line 19, please insert the following heading:

--Summary of the Invention--

On page 2, please amend the paragraph beginning at line 19 as follows:

--The present invention offers a new approach for sending High-Speed Indicator (HI) information in the downlink signaling of High-Speed Downlink Packet Access (HSDPA) for Time Division Duplex (TDD) mode, ~~particular~~ particularly for Universal Mobile Telecommunication System (UMTS) Terrestrial radio access network (UTRAN). The present invention aims to overcome the above described disadvantages of the method of state of the art. The basic idea of the present invention resides in that reserved and currently unused bits on the Paging Indicator Channel (PICH) are used to transmit High-Speed Indicator (HI) information to indicate a mobile terminal device to receive and decode signaling information on the High-Speed Shared Control Channel (HS-SCCH).--

On page 2, please amend the paragraph beginning at line 29 as follows:

--The usage of the Paging Indicator Channel (PICH) and the reserved bits thereon offers the possibility to establish a High-Speed Downlink Packet Access (HSDPA) without involving the associated [[the]] Dedicated Channel (DCH) for each mobile terminal device employing the access service and thus saving Dedicated Channel (DCH) resources. Further, the implementation of a scheduler controlling the High-Speed Downlink Packet Access (HSDPA) and signaling thereof may be easier. Different coding of the reserved bits of the Paging Indicator Channel (PICH) used for signaling may offer additional flexibility since the coding may allow different mapping with respect to the configuration of the system. Moreover, the Paging Indicator Channel (PICH) is transmitted with high power. The high power transmission ensures that all mobile terminal devices within a cell may receive an adequate signal for decoding.--

On page 3, please amend the paragraph beginning at line 31 as follows:

--Preferably, the plurality of identification bits are four identification bits. The identification bits may be arranged adjacent to a midamble of the Paging Indicator Channel according to the slot structure thereof. The identification bits may be ~~groups~~ grouped in two pairs each comprising two bits. The pairs are arranged on either side of the midamble.--

On page 8, please amend the paragraph beginning at line 20 as follows:

--Moreover, the wireless communication system may also provide and transmit signaling information on a High-Speed Shared Control Channel (HS-SCCH) and/or data packets on a Downlink Shared Channel (DSCH). Corresponding means for generating and transmitting of corresponding radio signals may preferably be provided by a sender of the mobile communication system.--

On page 9, prior to line 1, please add the following heading:

--Brief Description of the Drawings--

On page 9, please amend the paragraph beginning at line 1 as follows:

--In the following, the invention will be described in detail by referring to the enclosed ~~drawing~~ drawings in which:

Fig. 1 shows a slot structure of a Paging Indicator Channel (PICH) according to an embodiment of the invention.

Fig. 2 shows a grouping of a plurality of mobile communication terminals according to an embodiment of the invention.

Fig. 3 shows a frame diagram of a high data transmitting situation according to an embodiment of the invention.

Fig. 4 shows a schematic block diagram of typical components of a mobile communication terminal enabled to operate the method according to an embodiment of the present invention.--

On page 9, prior to line 12, please add the following heading:

--Detailed Description--

On page 9, please amend the paragraph beginning at line 17 as follows:

--The communication of data via a time duplex division (TDD) radio frequency communication system between a plurality of communication members such as base stations and mobile communication ~~terminal~~ terminals is based on time slotted transmission structure within the time domain whereupon the certain periods of time are dedicated and assigned for the communication of a certain member of the time duplex division (TDD) radio frequency communication system. According to a standard defined by the 3GPP (3rd Generation Partnership Project) a time duplex division (TDD) radio communication system, especially time duplex division (TDD) based universal mobile telecommunication services terrestrial radio access network (UTRAN), the time structure of a time duplex division radio communication network may be described by radio frames and time slots, wherein

each radio frame comprises a plurality of time slots. According to the 3GPP standard definition, each time division multiple access (TDMA) frame has a duration of 10 ms and is subdivided into fifteen time slots (TS), whereas each time slot may be further subdivided into 2560 chips.--

On page 9, please amend the paragraph beginning at line 31 as follows:

--The time slots may be allocated to either an uplink or a downlink transmission between a mobile terminal device and a base station. The time slot may be allocated completely to one of the transmission ~~direction~~ directions so that a frame may comprise an arbitrary sequence of uplink and downlink transmissions. The 2560 chips of a time slot may be primarily used for coding or spreading the communicated data within a time slot, respectively. The spreading of communicated data within a time slot is out of the scope of this invention and known to those skilled in the art and described in available standard documents of the 3rd Generation Partnership Project (3GPP).--

On page 10, please amend the paragraph beginning at line 20 as follows:

--The midamble may comprise training sequences. Since the total length of a burst may be defined by a time slot, the training sequence or midamble of a type 1 burst comprises a training sequence of more data symbols than a type 2 burst. The guard period of both the type 1 and type 2 burst may comprise the same number of data symbols.--

On page 11, please amend the paragraph beginning at line 6 as follows:

--These four reserved bits $SNPIB+1$, ..., $SNPIB+4$ may be used for addressing an individual mobile terminal device out of a group of mobile terminal devices and indicating to the mobile terminal device to receive a high-speed downlink packet. Therefore, the four reserved bits may be designated in the following description as an address or a High-Speed Indicator (HI). Two different ~~coding~~ codings may be employed for enabling an addressing of a mobile terminal device.--

On page 11, please amend the paragraph beginning at line 23 as follows:

--The addresses $0000_2 = 0_{10}$, $1111_2 = 15_{10}$ may be reserved for special addressing operations and not assigned to any certain mobile terminal device. The address $0000_2 = 0_{10}$ may indicate that no one of the mobile terminal devices of the group thereof may [[is]] be addressed, whereas the address $1111_2 = 15_{10}$ may indicate that all mobile terminal devices of the group thereof may be addressed.--

On page 13, please amend the paragraph beginning at line 1 as follows:

--The usage and functionality connected to the addresses "0000" and "1111" is the same like that described in combination with the first address coding procedure. A coded address "0000" may indicate that no one of the mobile terminal devices is addressed to initiate a data transmission. Correspondingly, an address "1111" may indicate an initialization of a data transmission to all four mobile terminal devices of the group.--

On page 19, after line 6, please add the following paragraphs:

--The block diagram of Fig. 4 illustrates a principal structural component design of a mobile communication terminal, which should exemplary represent any kind of portable consumer electronic (CE) device 100 capable for mobile communications, especially in the universal mobile telecommunications systems (UMTS). It shall be understood that the present invention is not limited to any specific kind of mobile communication terminal such as the one illustrated. The illustrated mobile communication terminal 100, which is implemented as a (micro-) processor-based or (micro-) controller-based device, comprises typically a central processing unit (CPU) 110, a data storage 120, an application storage 130 and input/output means including audio input/output (I/O) means 140 comprising typically a microphone 144 and a loudspeaker 146, a keypad and/or keys 155 with a corresponding (key) input controller (Ctrl) 150 and a display 165 with a display controller (Ctrl) 160 controlling the operation of the display 165.

The display 165 and display controller (Ctrl) 160 are controlled by the central processing unit (CPU) 110 and provide information displayed to the user. The keypad 155 and keypad controller (Ctrl) 150 are provided to allow the user to input information. The information

input via the keypad 155 is supplied to the central processing unit (CPU) 110, which may be controlled in accordance with the input information. The audio input/output (I/O) means 140 includes at least a speaker 146 for reproducing an audio signal and a microphone 144 for recording an audio signal. The central processing unit (CPU) 110 may control the conversion of audio data to audio output signals and the conversion of audio input signals into audio data, where for instance the audio data have a suitable format for transmission and storing.

Additionally, the mobile communication terminal 100 according to an embodiment of the present invention includes a cellular interface (I/F) 170 coupled to a cellular antenna (not shown) and operable with a corresponding subscriber identification module (SIM) 180. The cellular interface (I/F) 170 is arranged as a cellular transceiver to receive signals from the cellular antenna, decodes the signals, demodulates them and also reduces them to the base band frequency. The cellular interface 170 provides for an over-the-air interface, which serves in conjunction with the subscriber identification module (SIM) 180 for cellular communications with a corresponding radio access network (RAN) of a public land mobile network (PLMN). The output of the cellular interface (I/F) 170 thus consists of a stream of data that may require further processing by the central processing unit (CPU) 110. The cellular interface (I/F) 170 arranged as a cellular transceiver also receives data from the central processing unit (CPU) 110, which is to be transmitted via the over-the-air interface to the radio access network (RAN). Therefore, the cellular interface (I/F) 170 encodes, modulates and up converts the signal to the radio frequency which is to be used. The cellular antenna then transmits the resulting radio frequency signal(s) to the corresponding radio access network (RAN) of the public land mobile network (PLMN).

Not shown but today typically implemented in mobile communication terminals, are data interfaces, such as a local (short-range) wireless data interface (I/F), a wire-based data interface (I/F) and/or a (radio frequency) identification module to provide for local wireless and/or wire-based data communication with a corresponding counterpart network, base station, transceiver and counterpart external device, respectively. A broad number of different technologies and standards are applicable for implementing such a local (short-range) wireless and wire-based data interfaces (I/F). For instance the local data interface (I/F) can be realized by a low-power radio frequency (LPRF) transceiver such as a Bluetooth transceiver, a WLAN (wireless local area network) transceiver, an ultra-wide

band (UWB) transceiver or any other transceiver e.g. operable with an IEEE 802.xx standard. Moreover, the local data interface (I/F) 210 can be also implemented as an infrared-based interface such as an IrDA (infrared direct access) interface or any other proprietary radio frequency and optical interface, respectively. A wire-based data interface (I/F) can be implemented as a serial data interface (I/F), a serial data bus interface (I/F), a Firewire interface, a universal serial bus (USB) interface, a parallel data interface (I/F) and other known or future wire-based interface technologies. The identification module may be designed as a (radio frequency) identification reader module for being operable in accordance with known identification technologies such as near field communication (NFC).

Those skilled in the art will appreciate that the operation of the mobile communication terminals as disclosed in detail with reference to Fig. 1 to 3 is operable with the embodiment of a mobile communication terminal illustrated in Fig. 4 and described above in detail with reference thereto. It shall be noted that the mobile communication terminal includes further components for performing the aforementioned functions and operations according to an embodiment of the invention. The components may be constituted by one or more code sections containing instructions for carrying out the necessary processing operations for performing the aforementioned functions and operations in conjunction with the components illustrated in Fig 4 and described with reference thereto.--